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UNITED STATES DISTRICT COURT  
 NORTHERN DISTRICT OF CALIFORNIA

ASETEK DANMARK A/S,  
  
 Plaintiff and  
 Counter-defendant,  
  
 v.  
  
 COOLIT SYSTEMS, INC.,  
  
 Defendant and  
 Counter-claimant.

Case No. 3:19-cv-00410-EMC

**ANSWER TO COMPLAINT FOR  
 PATENT INFRINGEMENT AND  
 COUNTERCLAIMS**

**DEMAND FOR JURY TRIAL**

Defendant and Counter-claimant CoolIT Systems, Inc. (“CoolIT”), hereby files its answer and affirmative defenses (“Answer”) to the Complaint filed on January 23, 2019 (“Complaint”) by Plaintiff and Counter-defendant Asetek Danmark A/S (“Asetek”). Each of the paragraphs below corresponds to the same numbered paragraph in the Complaint. CoolIT denies all allegations in the Complaint, whether express or implied, that are not specifically admitted below. CoolIT further denies that Asetek is entitled to the relief requested in the Complaint, or to any other relief.

**NATURE OF ACTION**

1. CoolIT admits that the complaint purports to state claims for infringement of Asetek’s U.S. Patent Nos. 8,240,362 (“the ’362 patent”); 8,245,764 (“the ’764 patent”); 9,733,681 (“the ’681 patent”); 10,078,354 (“the ’354 patent”); and 10,078,355 (“the ’355 patent”) (collectively “the Asetek Patents”). CoolIT denies the remaining allegations in paragraph 1.

**THE PARTIES**

2. CoolIT lacks sufficient information to form a belief as to the truth of the allegations recited in paragraph 2, and on that basis denies them.

3. Admitted.

**JURISDICTION AND VENUE**

4. CoolIT admits that the Complaint purports to bring an action for patent infringement under the patent laws of the United States. CoolIT denies any and all allegations of patent infringement alleged in the Complaint. CoolIT also denies the legal sufficiency of Asetek's claims and allegations and denies Asetek has any viable claims as to CoolIT. CoolIT admits that this Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1338(a) and 1331.

5. CoolIT denies that it infringes the Patents-in-Suit. CoolIT admits that it has a website through which it promotes its liquid cooling products. CoolIT denies that it offers to sell or sells products to Corsair Components, Inc. and/or Corsair Memory, Inc. CoolIT is without sufficient information to enable it to admit or deny the location of Corsair's principal place of business, and, on that basis, that allegation is denied. CoolIT denies that any of the products it sells infringe any of the Patents-in-Suit. CoolIT denies the existence of a "retail collaboration" between Corsair and CoolIT. All remaining allegations of this paragraph are denied.

6. CoolIT admits that at least some CoolIT products accused of infringement are used in computers in California and in this district. CoolIT denies that any CoolIT products infringe any Asetek Patents and denies the remaining allegations in this paragraph.

7. CoolIT does not challenge venue in this district for this action only.

**FACTUAL BACKGROUND**

8. CoolIT lacks sufficient information to form a belief as to the truth of the allegations recited in paragraph 8, and on that basis denies them.

9. CoolIT lacks sufficient information to form a belief as to the truth of the allegations recited in paragraph 9, and on that basis denies them.

10. CoolIT admits that it is a provider of Direct Contact Liquid Cooling (DCLC) solutions to datacenters, Hyperscalers, desktop OEMs, and enthusiasts. CoolIT further admits that it

1 manufactures or has manufactured the H60, H100i Extreme Performance, H100i RGB Platinum,  
2 H100i RGB Platinum SE, H110i Extreme Performance, and H115i RGB Platinum cooling products.  
3 CoolIT denies that any of those products, or any other products it sells, infringes any of the Asetek  
4 Patents. CoolIT denies that it offers to sell or sells products to “Corsair,” i.e. Corsair Components,  
5 Inc. and/or Corsair Memory, Inc. CoolIT denies that it “offers to sell and sells one or more of the  
6 H60, H100i Extreme Performance, H100i RGB Platinum, H100i RGB Platinum SE, H110i Extreme  
7 Performance, and H115i RGB Platinum product configurations to other resellers/retailers or additional  
8 customers in the United States under different names or different exterior (cosmetic) finishing” and/or  
9 that any such products, to the extent any exist, infringe any of the Asetek Patents. All remaining  
10 allegations of this paragraph are denied.

11 **11.** CoolIT denies that it “offers to sell and sells in the United States additional liquid  
12 cooling products that have CoolIT’s E3 pump technology with split-flow cold plates and/or EP2 active  
13 cold plates” and/or that any such products, to the extent any exist, infringe any of the Asetek Patents.  
14 CoolIT further denies it “offers to sell and sells liquid cooling products that have CoolIT’s E3 pump  
15 technology with split-flow cold plates, or variants thereof, to Corsair” and/or that any such products,  
16 to the extent any exist, infringe any of the Asetek Patents. All remaining allegations of this paragraph  
17 are denied.

18 **12.** CoolIT denies that it “offers to sell and sells in the United States RackDCLC and  
19 server-level cooling loops having active cold plates to datacenter/server OEMs/ODMs and  
20 Hyperscalers” and/or that any such products, to the extent any exist, infringe any of the Asetek Patents.  
21 CoolIT has investigated and has not found any evidence supporting Asetek’s allegation and on that  
22 basis denies the allegation. All remaining allegations of this paragraph are denied.

23 **13.** This paragraph contains allegations to which no response is required. To the extent a  
24 response is required, CoolIT denies the allegations in this paragraph. CoolIT further denies the  
25 remaining allegations in this paragraph.

26 **14.** CoolIT admits that the ’764 and ’362 patents were previously at issue in Case No. 12-  
27 cv-04498-EMC. CoolIT admits that it has had knowledge of the ’764 and ’362 patents on the date  
28 each of those patents issued. CoolIT admits that, on their face, the ’681, the ’354, and the ’355 patents

1 purport to be continuations of the '764 and '362 patents. CoolIT denies the remaining allegations in  
2 this paragraph.

3 **15.** CoolIT admits that it received a letter from Asetek in July 2016 from Asetek. CoolIT  
4 denies the remaining allegations in this paragraph.

### 5 **COUNT I**

#### 6 **Infringement of U.S. Patent No. 8,240,362**

7 **16.** CoolIT admits that Exhibit A purports to be a copy of the '362 patent. CoolIT lacks  
8 sufficient information to form a belief as to the truth of the remaining allegations recited in paragraph  
9 16, and on that basis denies them.

10 **17.** Denied.

11 **18.** Denied.

12 **19.** Denied.

13 **20.** Denied.

14 **21.** Denied.

15 **22.** Denied.

16 **23.** Denied.

17 **24.** Denied.

18 **25.** Denied.

19 **26.** Denied.

20 **27.** Denied.

21 **28.** Denied.

22 **29.** Denied.

### 23 **COUNT II**

#### 24 **Infringement of U.S. Patent No. 8,245,764**

25 **30.** CoolIT admits that Exhibit B purports to be a copy of the '764 patent. CoolIT lacks  
26 sufficient information to form a belief as to the truth of the remaining allegations recited in paragraph  
27 30, and on that basis denies them.

28 **31.** Denied.

- 1           **32.**    Denied.
- 2           **33.**    Denied.
- 3           **34.**    Denied.
- 4           **35.**    Denied.
- 5           **36.**    Denied.
- 6           **37.**    Denied.
- 7           **38.**    Denied.
- 8           **39.**    Denied.
- 9           **40.**    Denied.
- 10          **41.**    Denied.
- 11          **42.**    Denied.
- 12          **43.**    Denied.

**COUNT III**

**Infringement of U.S. Patent No. 9,733,681**

15           **44.**    CoolIT admits that Exhibit C purports to be a copy of the '681 patent. CoolIT lacks  
16 sufficient information to form a belief as to the truth of the remaining allegations recited in paragraph  
17 44, and on that basis denies them.

- 18           **45.**    Denied.
- 19           **46.**    Denied.
- 20           **47.**    Denied.
- 21           **48.**    Denied.
- 22           **49.**    Denied.
- 23           **50.**    Denied.
- 24           **51.**    Denied.
- 25           **52.**    Denied.
- 26           **53.**    Denied.
- 27           **54.**    Denied.
- 28           **55.**    Denied.

- 1           **56.**     Denied.
- 2           **57.**     Denied.
- 3           **58.**     Denied.
- 4           **59.**     Denied.
- 5           **60.**     Denied.
- 6           **61.**     Denied.
- 7           **62.**     Denied.
- 8           **63.**     Denied.

**COUNT IV**

**Infringement of U.S. Patent No. 10,078,354**

**64.**     CoolIT admits that Exhibit D purports to be a copy of the '354 patent. CoolIT lacks sufficient information to form a belief as to the truth of the remaining allegations recited in paragraph 64, and on that basis denies them.

- 14          **65.**     Denied.
- 15          **66.**     Denied.
- 16          **67.**     Denied.
- 17          **68.**     Denied.
- 18          **69.**     Denied.
- 19          **70.**     Denied.
- 20          **71.**     Denied.
- 21          **72.**     Denied.
- 22          **73.**     Denied.
- 23          **74.**     Denied.
- 24          **75.**     Denied.
- 25          **76.**     Denied.
- 26          **77.**     Denied.
- 27          **78.**     Denied.
- 28          **79.**     Denied.

**COUNT V****Infringement of U.S. Patent No. 10,078,355**

**80.** CoolIT admits that the Exhibit E purports to be a copy of the '355 patent. CoolIT lacks sufficient information to form a belief as to the truth of the remaining allegations recited in paragraph 80, and on that basis denies them.

**81.** Denied.

**82.** Denied.

**83.** Denied.

**84.** Denied.

**85.** Denied.

**86.** Denied.

**87.** Denied.

**88.** Denied.

**89.** Denied.

**90.** Denied.

**91.** Denied.

**92.** Denied.

**93.** Denied.

**94.** Denied.

**ASETEK'S PRAYER FOR RELIEF**

CoolIT incorporates by reference all preceding paragraphs of this Answer as if fully set forth herein. CoolIT denies any and all allegations of patent infringement in the Complaint. CoolIT denies all allegations that Asetek is entitled to any relief requested in paragraphs "A-H" of the Complaint's Prayer for Relief, or any other relief.

**ASETEK'S DEMAND BY JURY TRIAL**

No response is required to this paragraph.

**AFFIRMATIVE DEFENSES**

Pursuant to Federal Rule of Civil Procedure 8(c), and without altering any applicable burdens of proof, CoolIT asserts the following defenses to the Complaint and reserves its right to assert additional defenses.

**FIRST AFFIRMATIVE DEFENSE – NON-INFRINGEMENT**

1. CoolIT does not infringe and has not infringed any valid claim of U.S. Patent Nos. 8,240,362, 8,245,764, 9,733,681, 10,078,354, and 10,078,355.

**SECOND AFFIRMATIVE DEFENSE – INVALIDITY**

2. One or more of the claims of U.S. Patent Nos. 8,240,362, 8,245,764, 9,733,681, 10,078,354, and 10,078,355 are invalid for failure to satisfy the conditions of patentability set forth in 35 U.S.C. §§ 101 et seq., including but not limited to §§ 101, 102, 103, and/or 112.

**THIRD AFFIRMATIVE DEFENSE – LIMITATION ON DAMAGES**

3. Asetek's claims for damages are barred, in whole or in part, by 35 U.S.C. §§ 286, 287, and/or 288, and/or 28 U.S.C. § 1498.

**FOURTH AFFIRMATIVE DEFENSE – EQUITABLE ESTOPPEL**

4. Asetek's claims for damages are barred, in whole or in part, by the doctrine of equitable estoppel.

**FIFTH AFFIRMATIVE DEFENSE – PROSECUTION HISTORY ESTOPPEL**

5. The relief sought by Asetek is barred, in whole or in part, under the doctrine of prosecution history estoppel due to amendments and/or statements made during prosecution of the Asetek Patents.

**SIXTH AFFIRMATIVE DEFENSE – IMPLIED LICENSE**

6. The relief sought by Asetek is barred, in whole or in part, by the doctrine of implied license.

**PRAYER FOR RELIEF**

WHEREFORE, CoolIT prays that this Court enter judgment:

A. In favor of CoolIT, and against Asetek, thereby dismissing the Complaint with prejudice, with Asetek taking nothing by the way of its claims;



B. That CoolIT has not infringed, and is not now infringing any valid claims of the '362 patent under any subsection of 35 U.S.C. § 271;

C. That all asserted claims of the '362 patent are invalid and/or unenforceable;

D. That CoolIT has not infringed, and is not now infringing any valid claims of the '764 patent under any subsection of 35 U.S.C. § 271;

E. That all asserted claims of the '764 patent are invalid and/or unenforceable;

F. That CoolIT has not infringed, and is not now infringing any valid claims of the '681 patent under any subsection of 35 U.S.C. § 271;

G. That all asserted claims of the '681 patent are invalid and/or unenforceable;

H. That CoolIT has not infringed, and is not now infringing any valid claims of the '354 patent under any subsection of 35 U.S.C. § 271;

I. That all asserted claims of the '354 patent are invalid and/or unenforceable;

J. That CoolIT has not infringed, and is not now infringing any valid claims of the '355 patent under any subsection of 35 U.S.C. § 271;

K. That all asserted claims of the '355 patent are invalid and/or unenforceable;

L. That this case stands out from others and as such is an exceptional case pursuant to 35 U.S.C. § 285 and ordering Asetek to pay CoolIT's reasonable attorneys' fees incurred in this action;

M. That Asetek pay all costs incurred by CoolIT in this action; and

N. Awarding CoolIT all other relief the Court deems just and proper.

#### **DEMAND FOR JURY TRIAL**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, CoolIT respectfully demands a trial by jury on all issues triable by jury.

#### **COOLIT'S COUNTERCLAIMS**

Defendant and Counter-claimant CoolIT hereby alleges the following counterclaims against Plaintiff and Counter-defendant Asetek:

#### **PARTIES**

1. Counter-claimant CoolIT is a corporation operating and existing under the laws of Canada with its principal place of business at 10 – 298 Sunridge Way NE, Calgary, Alberta, T1Y 7H9

1 Canada.

2 2. Upon information and belief, Counterclaim-Defendant Asetek Danmark A/S is a  
3 corporation organized and existing under the laws of Denmark, and has a principal place of business  
4 at Assensvej 2, DK-9220 Aalborg East, Denmark.

### 5 **JURISDICTION AND VENUE**

6 3. This is a civil action regarding allegations of patent infringement arising under the  
7 patent laws of the United States, Title 35 of the United States Code. This Court has subject matter  
8 jurisdiction over this matter pursuant to 28 U.S.C. §§ 1331 and 1338.

9 4. This court has jurisdiction over Asetek because Asetek consented to personal  
10 jurisdiction in this Court by filing the Complaint in this action.

11 5. Venue is proper in this Court with respect to Asetek because Asetek filed the Complaint  
12 in this action.

### 13 **FACTUAL BACKGROUND**

14 6. CoolIT was founded in 2001. CoolIT's first products delivered superior performance  
15 for high-end workstations and gaming computers. CoolIT has since expanded its technology to  
16 support large scale data centers. CoolIT is the leading liquid cooling solution provider for HPC, Cloud  
17 and Enterprise markets worldwide. CoolIT's patented Direct Contact Liquid Cooling technology  
18 provides exceptional performance to support large scale data center installations.

19 7. CoolIT is the owner by assignment of all right, title, and interest in U.S. Patent Nos.  
20 8,746,330 (the "'330 patent"), 9,603,284 (the "'284 patent"), 9,057,567 (the "'567 patent"), and  
21 6,529,376 (the "'376 patent") (collectively "the CoolIT Patents").

22 8. Upon information and belief, Asetek manufactures, has manufactured, imports, offers  
23 to sell, and sells at least the Asetek 510LC, 545LC, 550LC, 570LC, 570LX, 570XLF, 591LX, 550QC,  
24 740QC, 740GN, Corsair Hydro Series H55, Corsair Hydro Series H70, Corsair Hydro Series H90,  
25 Corsair Hydro Series H110, Corsair Hydro Series H80i, Corsair Hydro Series H100i Pro, Intel  
26 BXRTS2011LC, NZXT Kraken X40, NZXT Kraken X60, Thermaltake Water 2.0 Performer,  
27 Thermaltake Water 2.0 Pro, Thermaltake Water 2.0 Extreme, Zalman CNPS20LQ, Zalman LQ – 310  
28 Water, Zalman LQ – 315 Water, Zalman LQ – 320 Water cooling products, as well as products

1 produced for the HP Workstation Z400, Z800, Z420, and Z820, Dell Alienware, and Asus liquid  
2 cooling products, that infringe the CoolIT Patents as detailed below.

3 9. Upon information and belief, the above-named products all incorporate technology that  
4 Asetek refers to as its Gen 4, Gen 5, or Gen 6. Upon information and belief, all Gen 4, Gen 5, and Gen  
5 6 products infringe the CoolIT Patents in the same manner as the representative H55 product referred  
6 to in Counts I-III below. Upon information and belief, any differences between the Gen 4, Gen5, and  
7 Gen 6 products and differences within any “generation” of Asetek products, are irrelevant to those  
8 products’ infringement of the CoolIT Patents. Asetek products incorporating its Gen 4, Gen 5, and Gen  
9 6 technologies are referred to collectively as “Asetek Accused Products.”

# 10 **COUNT I**

## 11 **ASETEK’S INFRINGEMENT OF U.S. PATENT NO. 8,746,330**

12 10. CoolIT incorporates by reference and re-alleges all foregoing paragraphs of this  
13 Complaint as if fully set forth herein.

14 11. CoolIT is the owner by assignment of U.S. Patent No. 8,746,330 (the “’330 patent”),  
15 entitled “Fluid Heat Exchanger Configured to Provide a Split Flow” including the exclusive right to  
16 bring suit to enforce the patent and the exclusive right to obtain relief for infringement. The ’330  
17 patent was duly and legally issued by the U.S. patent and Trademark Office on June 10, 2014.

18 12. A true and correct copy of the ’330 patent is attached as Exhibit A.

19 13. The ’330 patent is valid and enforceable under the United States Patent Laws.

20 14. The ’330 patent was previously asserted against Asetek’s parent company, Asetek  
21 Holdings Inc. in *CoolIT Systems Inc. v. Asetek Holdings Inc.*, Case no. 1:14-cv-00725-RGA in the  
22 United States District Court for the District of Delaware. Asetek Holdings Inc.’s knowledge of the  
23 ’330 patent can be imputed to Asetek by virtue of their corporate relationship. Thus, Asetek has had  
24 knowledge of the ’330 patent since at least the date it executed a waiver of service in that case on July  
25 15, 2014.

26 15. Asetek has infringed and is continuing to infringe the ’330 patent by making, using,  
27 selling, and/or offering to sell in the United States, or importing into the United States the Asetek  
28 Accused Products that practice the ’330 patent in violation of 35 U.S.C. §271(a), including without

1 limitation its H55 product.

2 16. Asetek's infringement of the '330 patent has caused and will continue to cause damage  
3 to CoolIT for which CoolIT is entitled to recovery under 35 U.S.C. § 284.

4 17. As set forth below, Asetek infringes the '330 patent. The following description is  
5 exemplary and illustrative of Asetek's infringement based on publicly available information. CoolIT  
6 expects to further develop the evidence of Asetek's infringement after obtaining discovery from  
7 Asetek in the course of this action.

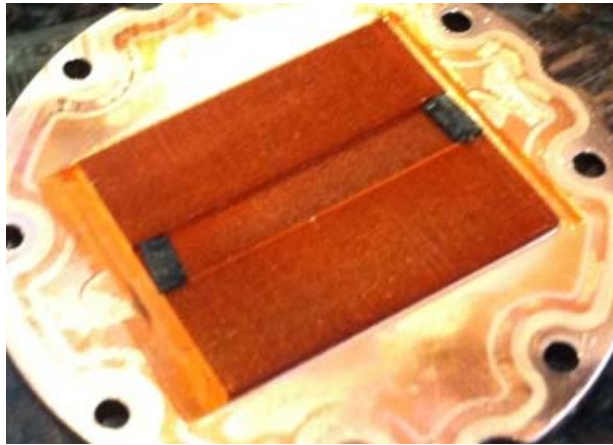
8 18. The Asetek Accused Products infringe at least claim 1 of the '330 patent. For example,  
9 Asetek's H55 product infringes at least claim 1 of the '330 patent.

10 19. The Asetek Accused products are *fluid heat exchangers*. For example, as shown below,  
11 Asetek's H55 product is a fluid heat exchanger apparatus.



26  
27 20. Upon information and belief, the Asetek Accused Products include *a plurality of fins*  
28 *extending from respective proximal ends positioned adjacent the upper surface of the heat spreader*

1 plate to respective distal ends positioned distally from the upper surface of the heat transfer plate,  
 2 wherein the plurality of fins defines a corresponding plurality of microchannels configured to direct  
 3 a heat transfer fluid over the heat spreader plate, wherein each microchannel in the plurality of  
 4 microchannels has a first end and an opposite end, wherein each microchannel in the plurality of  
 5 microchannels extends substantially parallel with each other microchannel in the plurality of  
 6 microchannels and has a continuous channel flow path between its respective first end and its  
 7 respective opposite end. For example, as shown below, the Asetek H55 product meets each and every  
 8 limitation of the above claim language. Upon information and belief, the Asetek H55 product has the  
 9 claimed plurality of fins extending from respective proximal ends positioned adjacent the upper  
 10 surface of the heat spreader plate to respective distal ends positioned distally from the upper surface  
 11 of the heat transfer plate. These fins direct a heat transfer fluid over the heat spreader plate in the  
 12 manner described in claim 1.



21  
 22 21. Upon information and belief, the Asetek Accused Products include a plate positioned  
 23 over the distal ends of the plurality of fins and the corresponding plurality of microchannels to close  
 24 off the plurality of microchannels adjacent the distal ends of the plurality of fins, wherein the plate  
 25 positioned over the plurality of distal fin ends defines an elongate fluid inlet opening overlying and  
 26 extending transversely relative to the plurality of microchannels between the plurality of microchannel  
 27 first ends and opposite ends, wherein the plate is so positioned over the plurality of fins as to define a  
 28 first fluid outlet opening from each microchannel in the plurality of microchannels at each of the

1 *microchannel first ends and an opposite fluid outlet opening from each microchannel in the plurality*  
 2 *of microchannels at each of the microchannel opposite ends.* For example, as shown below, the Asetek  
 3 H55 product meets each and every limitation of the above claim language. Upon information and  
 4 belief, the Asetek H55 product has a plate positioned over the distal ends of the plurality of fins. Upon  
 5 information and belief, this plate closes off the plurality of microchannels adjacent to the distal ends  
 6 of the plurality of fins to define the fluid inlet and outlet openings as described in claim 1.



20 22. Upon information and belief, the Asetek Accused Products include *a housing spaced*  
 21 *from the plate positioned over the plurality of distal fin ends, wherein the housing defines an inlet and*  
 22 *an outlet, wherein the inlet defined by the housing opens to an inlet header and at least the first fluid*  
 23 *outlet opening from each microchannel in the plurality of microchannels opens to an outlet header,*  
 24 *wherein the outlet defined by the housing opens from the outlet header.* For example, as shown below,  
 25 the Asetek H55 product meets each and every limitation of the above claim language. Upon  
 26 information and belief, the Asetek H55 product has a housing spaced from the plate that defines an  
 27 inlet and an outlet as described in claim 1.





23. Upon information and belief, the Asetek Accused Products include *a seal extending between the housing and the plate positioned over the plurality of distal fin ends, wherein the elongate fluid inlet opening defined by the plate extends between a proximal end and a distal end, wherein a region of the inlet header is positioned adjacent a first side of the fins and a region of the outlet header is positioned adjacent the second side of the fins, and wherein the fins, the plate, the housing, and the seal are arranged such that the heat transfer fluid is directed from the inlet opening to the inlet header, through the elongate fluid inlet opening defined by the plate and into the microchannels, from the microchannels to the outlet header, and from the outlet header to the outlet defined by the housing.* For example, as shown below, the Asetek H55 product meets each and every limitation of the above claim language. Upon information and belief, the Asetek H55 product has a seal that extends between the housing and the plate. The plate, housing, and seal in the Asetek H55 product are arranged such that the heat transfer fluid is directed from the inlet opening to the inlet header, through the elongate fluid inlet opening defined by the plate and into the microchannels, from the microchannels to the outlet header, and from the outlet header to the outlet defined by the housing.



24. Upon information and belief, Asetek has induced and continues to induce infringement of at least claim 1 of the '330 patent by others, including its customers, in violation of 35 U.S.C. § 271(b). Asetek has had actual knowledge of the '330 patent as discussed above. Upon information and belief, Asetek has taken affirmative steps to teach and encourage others, including its customers, how to directly infringe the '330 patent. For example, upon information and belief, Asetek has provided training, guidance, instructions, and transfer of know-how in the form of presentations, manuals, guides, training sessions, collaborations, and partnerships to others, including its customers, on how to use the Asetek Accused Products or incorporate the same technology into their own products. Asetek has provided this information knowing that it infringes the '330 patent or being willfully blind to its infringement.

25. Upon information and belief, Asetek has contributed to and continues to contribute to the direct infringement of at least claim 1 of the '330 patent by others, including its customers, in violation of 35 U.S.C. § 271(c). Upon information and belief, Asetek supplies material components of the Asetek Accused Products to others, including its customers. Upon information and belief, Asetek provides instructions to others, including its customers, on how to incorporate material components provided by Asetek into the Asetek Accused Products in infringing the '330 patent. Upon



information and belief, Asetek provides these material components knowing, or being willfully blind to the fact, that they are especially made and/or adapted for use in infringing the '330 patent and that the material components provided by Asetek to others, including its customers, are not a staple article or commodity of commerce and are not suitable for substantial noninfringing use.

26. Upon information and belief, Asetek's infringement of the '330 patent has been willful with full knowledge of the patent and/or willfully blind to the risk of infringement.

27. CoolIT is entitled to relief as a result of Asetek's infringement, including without limitation monetary damages no less than a reasonable royalty.

## **COUNT II**

### **ASETEK'S INFRINGEMENT OF U.S. PATENT NO. 9,603,284**

28. CoolIT incorporates by reference and re-alleges all foregoing paragraphs of this Complaint as if fully set forth herein.

29. CoolIT is the owner by assignment of U.S. Patent No. 9,603,284 (the "'284 patent"), entitled "Fluid Heat Exchanger Configured to Provide a Split Flow" including the exclusive right to bring suit to enforce the patent and the exclusive right to obtain relief for infringement. The '284 patent was duly and legally issued by the U.S. patent and Trademark Office on March 21, 2017.

30. A true and correct copy of the '284 patent is attached as Exhibit B.

31. The '284 patent is valid and enforceable under the United States Patent Laws.

32. Asetek has had actual knowledge of the '284 patent since at least the filing of these of counterclaims. Upon information and belief, Asetek has had actual knowledge of the '284 patent at least since it issued as Asetek regularly monitors CoolIT's patent filings.

33. Asetek has infringed and is continuing to infringe the '284 patent by making, using, selling, and/or offering to sell in the United States, or importing into the United States the Asetek Accused Products that practice the '284 patent in violation of 35 U.S.C. §271(a), including without limitation its H55 product.

34. Asetek's infringement of the '284 patent has caused and will continue to cause damage to CoolIT for which CoolIT is entitled to recovery under 35 U.S.C. § 284.

35. As set forth below, Asetek infringes the '284 patent. The following description is exemplary and illustrative of Asetek's infringement based on publicly available information. CoolIT expects to further develop the evidence of Asetek's infringement after obtaining discovery from Asetek in the course of this action.

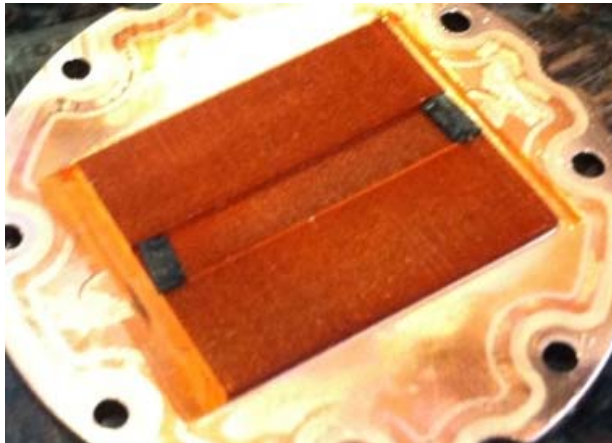
36. The Asetek Accused Products infringe at least claim 1 of the '284 patent. For example, Asetek's H55 product infringes at least claim 1 of the '284 patent.

37. The Asetek Accused products are *fluid heat exchangers for cooling an electronic device*. For example, as shown below, Asetek's H55 product is a fluid heat exchanger apparatus for cooling an electronic device.



38. Upon information and belief, the Asetek Accused Products include a *plurality of spaced-apart walls defining a corresponding plurality of microchannels having respective first ends and second ends*. For example, as shown below, the Asetek H55 product meets each and every limitation of the above claim language. Upon information and belief, the Asetek H55 product has a plurality of spaced-apart walls defining a corresponding plurality of microchannels as described in

claim 1.



39. Upon information and belief, the Asetek Accused Products include *an elongate inlet opening in fluid communication with each of the microchannels, wherein an inlet flow path to each respective microchannel is positioned between the respective first ends and second ends*. For example, as shown below, the Asetek H55 product meets each and every limitation of the above claim language. Upon information and belief, the Asetek H55 product has an elongate inlet opening in fluid communication with each of the microchannels as described in claim 1.



40. Upon information and belief, the Asetek Accused Products include *an outlet opening in fluid communication with each of the microchannel first ends, wherein a corresponding outlet flow*

1 path from each of the microchannel first ends is positioned laterally outward of the plate relative to  
 2 the inlet flow path to the respective microchannel, wherein the plurality of spaced-apart walls  
 3 comprises a first outermost wall and a second outermost wall spaced apart from and opposite the first  
 4 outermost wall relative to the plurality of microchannels, wherein the outlet flow path from a centrally  
 5 positioned microchannel first end positioned between the first outermost wall and the second  
 6 outermost wall is larger than the outlet flow path from another microchannel first end positioned  
 7 adjacent the first outermost wall, the second outermost wall, or both. For example, as shown below,  
 8 the Asetek H55 product meets each and every limitation of the above claim language. Upon  
 9 information and belief, the Asetek H55 product has an outlet opening in fluid communication with  
 10 each of the microchannel first ends. Upon information and belief, the outlet flow path from a centrally  
 11 positioned microchannel first end positioned between the first outermost wall and the second  
 12 outermost wall is larger than the outlet flow path from another microchannel first end positioned  
 13 adjacent the first outermost wall, the second outermost wall, or both as described in claim 1.



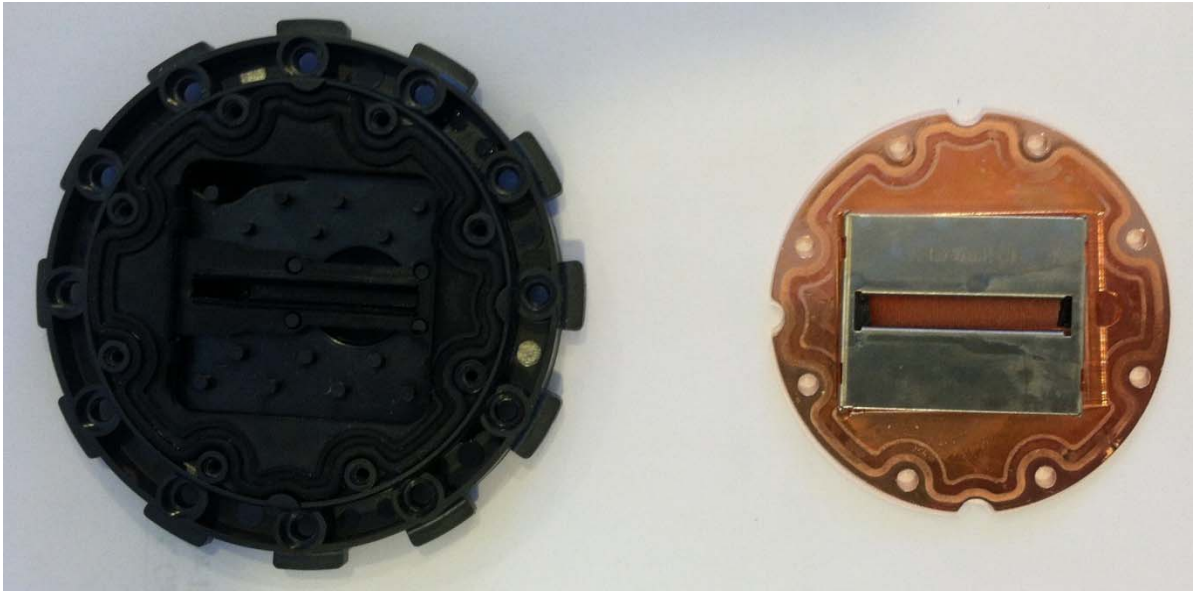
25 41. Upon information and belief, the Asetek Accused Products include a housing  
 26 positioned over and spaced apart from the plate, wherein the housing has an inlet port and an outlet  
 27 port spaced apart from each other, wherein the inlet port is in fluid communication with each  
 28 respective inlet flow path and the outlet port is in fluid communication with each respective outlet flow

1 *path from the microchannel first ends.* For example, as shown below, the Asetek H55 product meets  
 2 each and every limitation of the above claim language. Upon information and belief, the Asetek H55  
 3 product has a housing positioned over and spaced apart from the plate as described in claim 1.



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 16 42. Upon information and belief, the Asetek Accused Products include *a seal extending*  
 17 *between the housing and the plate and separating the inlet flow path to each of the microchannels*  
 18 *from the outlet flow path from each of the microchannel first ends, wherein each respective inlet flow*  
 19 *path is split generally into two subflow paths, wherein one of the subflow paths extends outwardly*  
 20 *toward the corresponding microchannel first end and passes outwardly of the plate along the outlet*  
 21 *flow path from the respective microchannel first end.* For example, as shown below, the Asetek H55  
 22 product meets each and every limitation of the above claim language. Upon information and belief,  
 23 the Asetek H55 product has a seal extending between the housing and the plate separating the inlet  
 24 flow path to each of the microchannels from the outlet flow path from each of the microchannel first  
 25 ends as described in claim 1.





43. Upon information and belief, Asetek has induced and continues to induce infringement of at least claim 1 of the '284 patent by others, including its customers, in violation of 35 U.S.C. § 271(b). Asetek has had actual knowledge of the '284 patent as discussed above. Upon information and belief, Asetek has taken affirmative steps to teach and encourage others, including its customers, how to directly infringe the '284 patent. For example, upon information and belief, Asetek has provided training, guidance, instructions, and transfer of know-how in the form of presentations, manuals, guides, training sessions, collaborations, and partnerships to others, including its customers, on how to use the Asetek Accused Products or incorporate the same technology into their own products. Asetek has provided this information knowing that it infringes the '284 patent or being willfully blind to its infringement.

44. Upon information and belief, Asetek has contributed to and continues to contribute to the direct infringement of at least claim 1 of the '284 patent by others, including its customers, in violation of 35 U.S.C. § 271(c). Upon information and belief, Asetek supplies material components of the Asetek Accused Products to others, including its customers. Upon information and belief, Asetek provides instructions to others, including its customers, on how to incorporate material components provided by Asetek into the Asetek Accused Products in infringing the '284 patent. Upon information and belief, Asetek provides these material components knowing, or being willfully blind

1 to the fact, that they are especially made and/or adapted for use in infringing the '284 patent and that  
 2 the material components provided by Asetek to others, including its customers, are not a staple article  
 3 or commodity of commerce and are not suitable for substantial noninfringing use.

4 45. Upon information and belief, Asetek's infringement of the '284 patent has been willful  
 5 with full knowledge of the patent and/or willfully blind to the risk of infringement.

6 46. CoolIT is entitled to relief as a result of Asetek's infringement, including without  
 7 limitation monetary damages no less than a reasonable royalty.

### 8 **COUNT III**

#### 9 **ASETEK'S INFRINGEMENT OF U.S. PATENT NO. 9,057,567**

10 47. CoolIT incorporates by reference and re-alleges all foregoing paragraphs of this  
 11 Complaint as if fully set forth herein.

12 48. CoolIT is the owner by assignment of U.S. Patent No. 9,057,567 (the "'567 patent"),  
 13 entitled "Fluid Heat Exchange Systems" including the exclusive right to bring suit to enforce the patent  
 14 and the exclusive right to obtain relief for infringement. The '567 patent was duly and legally issued  
 15 by the U.S. patent and Trademark Office on June 16, 2015.

16 49. A true and correct copy of the '567 patent is attached as Exhibit C.

17 50. The '567 patent is valid and enforceable under the United States Patent Laws.

18 51. Asetek has had actual knowledge of the '567 patent since at least the filing of these of  
 19 counterclaims. Upon information and belief, Asetek has had actual knowledge of the '567 patent at  
 20 least since it issued as Asetek regularly monitors CoolIT's patent filings.

21 52. Asetek has infringed and is continuing to infringe the '567 patent by making, using,  
 22 selling, and/or offering to sell in the United States, or importing into the United States the Asetek  
 23 Accused Products that practice the '567 patent in violation of 35 U.S.C. §271(a), including without  
 24 limitation its H55 product.

25 53. Asetek's infringement of the '567 patent has caused and will continue to cause damage  
 26 to CoolIT for which CoolIT is entitled to recovery under 35 U.S.C. § 284.

27 54. As set forth below, Asetek infringes the '567 patent. The following description is  
 28 exemplary and illustrative of Asetek's infringement based on publicly available information. CoolIT

1 expects to further develop the evidence of Asetek's infringement after obtaining discovery from  
2 Asetek in the course of this action.

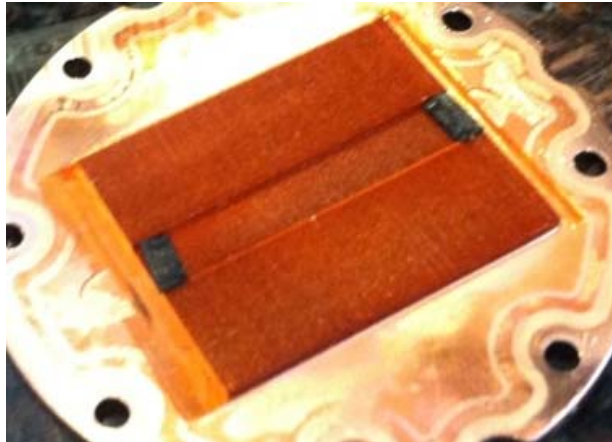
3 55. The Asetek Accused Products infringe at least claim 1 of the '567 patent. For example,  
4 Asetek's H55 product infringes at least claim 1 of the '567 patent.

5 56. The Asetek Accused products are *heat exchange systems*. For example, as shown  
6 below, Asetek's H55 product is a heat exchange system.



21 57. Upon information and belief, the Asetek Accused Products include *a heat sink having*  
22 *a plurality of juxtaposed fins defining a corresponding plurality of microchannels between adjacent*  
23 *fins, wherein the heat sink defines a recessed groove extending transversely relative to the fins*. For  
24 example, as shown below, the Asetek H55 product meets each and every limitation of the above claim  
25 language. Upon information and belief, the Asetek H55 product has a heat sink having a plurality of  
26 juxtaposed fins defining a corresponding plurality of microchannels between adjacent fins as described  
27 in claim 1.





58. Upon information and belief, the Asetek Accused Products include *a housing member defining a first side and a second side, wherein the second side defines a recessed region*. For example, as shown below, the Asetek H55 product meets each and every limitation of the above claim language. Upon information and belief, the Asetek H55 product has a housing member defining a first side and a second side as described in claim 1.



59. Upon information and belief, the Asetek Accused Products include *a compliant member matingly engaged with the second side of the housing member, wherein the compliant member*

1 *at least partially defines an opening positioned over the groove, wherein the compliant member and*  
 2 *the groove together define a portion of an inlet manifold configured to hydraulically couple in parallel*  
 3 *each of the microchannels to at least one other of the microchannels, and wherein the housing member*  
 4 *further defines a portion of an inlet plenum, wherein the inlet plenum and the inlet manifold are*  
 5 *together configured to convey a fluid in a direction generally transverse to the fins and thereby to*  
 6 *distribute the fluid among the plurality of microchannels and to convey the fluid into the plurality of*  
 7 *microchannels in a direction generally parallel to the fins, wherein a portion of the compliant member*  
 8 *occupies a portion of the recessed region defined by the second side of the housing member and urges*  
 9 *against a corresponding wall of the recessed region while leaving a portion of the recessed region*  
 10 *defined by the second side of the housing member unoccupied to define first and second exhaust*  
 11 *manifold regions positioned opposite to each other relative to the recessed groove and opening from*  
 12 *end regions of the microchannels. For example, as shown below, the Asetek H55 product meets each*  
 13 *and every limitation of the above claim language. Upon information and belief, the Asetek H55*  
 14 *product has a compliant member matingly engaged with the second side of the housing member as*  
 15 *described in claim 1.*



60. Upon information and belief, Asetek has induced and continues to induce infringement of at least claim 1 of the '567 patent by others, including its customers, in violation of 35 U.S.C. § 271(b). Asetek has had actual knowledge of the '567 patent as discussed above. Upon information and belief, Asetek has taken affirmative steps to teach and encourage others, including its customers, how to directly infringe the '567 patent. For example, upon information and belief, Asetek has provided training, guidance, instructions, and transfer of know-how in the form of presentations, manuals, guides, training sessions, collaborations, and partnerships to others, including its customers, on how to use the Asetek Accused Products or incorporate the same technology into their own products. Asetek has provided this information knowing that it infringes the '567 patent or being willfully blind to its infringement.

61. Upon information and belief, Asetek has contributed to and continues to contribute to the direct infringement of at least claim 1 of the '567 patent by others, including its customers, in violation of 35 U.S.C. § 271(c). Upon information and belief, Asetek supplies material components of the Asetek Accused Products to others, including its customers. Upon information and belief, Asetek provides instructions to others, including its customers, on how to incorporate material components provided by Asetek into the Asetek Accused Products in infringing the '567 patent. Upon information and belief, Asetek provides these material components knowing, or being willfully blind to the fact, that they are especially made and/or adapted for use in infringing the '567 patent and that the material components provided by Asetek to others, including its customers, are not a staple article or commodity of commerce and are not suitable for substantial noninfringing use.

62. Upon information and belief, Asetek's infringement of the '567 patent has been willful with full knowledge of the patent and/or willfully blind to the risk of infringement.

63. CoolIT is entitled to relief as a result of Asetek's infringement, including without limitation monetary damages no less than a reasonable royalty.

### **PRAYER FOR RELIEF**

WHEREFORE, CoolIT prays that this Court enter judgment:

A. That Judgement be entered that Asetek has infringed each of the CoolIT Patents under 35 U.S.C. § 271;

1 B. An award of monetary damages sufficient to compensate CoolIT for Asetek's  
2 infringement under 35 U.S.C. § 284;

3 C. A trebling of damages under 35 U.S.C. § 284 for Asetek's willful infringement;

4 D. Costs and expenses incurred by CoolIT in this action;

5 E. An award of prejudgment and post-judgment interest;

6 F. A finding that this case is exceptional under 35 U.S.C. § 285 and awarding CoolIT's  
7 its attorneys' fees; and

8 G. Such other and further relief as the Court may deem just and proper.

9 **DEMAND FOR JURY TRIAL**

10 Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, CoolIT respectfully demands  
11 a trial by jury on all issues triable by jury.

12  
13 Dated: April 11, 2019

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REUBEN H. CHEN (228725)  
DANIEL J. KNAUSS (267414)  
LAM K. NGUYEN (265285)

14  
15  
16  
17  
18 /s/ Heidi L. Keefe

Heidi L. Keefe  
Attorneys for Defendant and Counter-claimant  
COOLIT SYSTEMS, INC.